## TAPER, BUFFER ZONE & SIGN SPACING CHART

ROAD	POSTED SPEED MPH (S)	MINIMUM TAPER LENGTH(L)	LENGTH OF BUFFER(BZ)	MINIMUM SIGN SPACING (SS)			ONE LANE TWO-WAY FLAGGING	
TYPE		12'LANE CLOSURE	DESIRABLE	А	В	С	D	TAPER LENGTH
	WII 11 (3)	feet	feet	feet	feet	feet	feet	feet
CONVENT I ONAL	30 AND LOWER	180	200	100	100 100 100			
	35	245	250	350	350	350	175	50
	40	320	305					
	45	540	360	500	500	500	250	100
	50	600	425					
	55	660	495					
	60	720	570					
	65	780	645					
FREEWAY/ EXPRESSWAY	65	780	645	1000	1640	2640	500	
	70	840	730					
	75	900	820					

## 1- TAPER LENGTH FORMULAS

SPEED	FORMULA
FOR SPEEDS OF 40 MPH AND LESS	$L = \frac{WS^2}{60}$
FOR SPEEDS OF 45 MPH AND GREATER	L= WS

L = TAPER LENGTH IN FEET W = WIDTH OF OFFSET IN FEET

S = SPEED IN MPH

1/3 L = FOR SHOULDER CLOSURE TAPER 1/2 L = FOR LANE SHIFT TAPER

### 2- CHANNELIZING DEVICES

- A) MERGING AND SHIFTING TAPERS: USE A MINIMUM OF 1 DEVICE PER FOOT OF LANE CLOSURE, PLUS 1 ADDITIONAL DEVICE TO START.
- B) SHOULDER, ONE-LANE TWO-WAY, AND DOWNSTREAM TAPERS: USE A MINIMUM OF 1 DEVICE PER 3 FEET OF WIDTH (OR PORTION THEREOF), PLUS 1 ADDITONAL DEVICE TO START.
- C) ON TANGENT: S  $\times$  2 = SPACING UP TO 120 FEET MAXIMUM.
- D) LENGTH OF BUFFER ZONE (BZ) IS THE DISTANCE FROM END OF LANE CLOSURE TAPER TO WORK SPACE, OR ANY OBSTRUCTION PRIOR TO WORK SPACE.

### TRAFFIC CONTROL DEVICE LEGEND

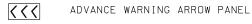


SIGN (FIXED OR PORTABLE)

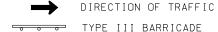


PLASTIC DRUMS/DIRECTIONAL INDICATOR BARRICADE



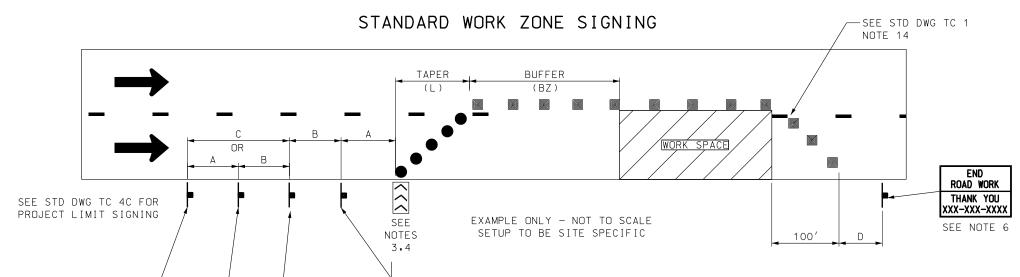








DIRECTION OF WORK VEHICLE





2,6,7

# NOTES:

- 1. USE THE POSTED SPEED LIMIT PRIOR TO WORK ZONE TO COMPUTE THE SIGN SPACING, TAPER LENGTH, BUFFER ZONE, AND WORK CLEAR ZONE DISTANCE. USE THE POSTED SPEED LIMIT DURING WORK TO DETERMINE THE TANGENT SPACING FOR CHANNELIZING DEVICES.
- 2. SIGN MAY BE USED ANYTIME IN WORK ZONE IN PLACE OF EXISTING SPEED LIMIT SIGNS (NO CHANGE IN SPEED LIMIT).
- 3. PLACE ADVANCE WARNING ARROW PANEL ON SHOULDER WHEN AVAILABLE. WHEN NO ADEQUATE SHOULDER IS AVAILABLE, PLACE ARROW PANEL IN FIRST 1/3 OF TAPER IN THE CLOSED LANE.
- 4. USE SHOULDER TAPER WHEN ARROW PANEL IS PLACED ON SHOULDER.
- 5. USE SUPPLEMENTAL LEFT SIDE SIGNING FOR HIGH-SPEED DIVIDED HIGHWAYS.
- 6. SEE STD DWG TC 4D FOR SIGN DESIGN AND LAYOUT.
- 7. USE "FINES DOUBLE" SIGNING AT ALL MAJOR INTERSECTIONS/INTERCHANGES WITHIN THE PROJECT WHEN "FINES DOUBLE" OPTION IS USED.

RANSPORTATION
BRIDGE CONSTRUCTION UTAH

TANDARD WORK ZONE SIGNING GENERAL ST<sub>1</sub>

STD. DWG. NO. TC 4A

WORK

AHEA[

WORK ZONE

FINES DOUBLE FOR SPEEDING

OPTIONAL

SEE NOTES 6,7

CLOSED

OR

RIGHT LAN